

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (previously presented) A solid oxide fuel cell comprising:
a cathode;
an electrolyte layer adjacent to the cathode; and
an anode adjacent to the electrolyte layer, the anode comprising:
a support structure defining at least a portion of an anode flow channel,
the anode flow channel having an anode flow channel entrance for the introduction of fuel to the
solid oxide fuel cell and an anode flow channel exit; and
a first and second catalyst that promote reforming and being dispersed
within or upon the support structure such that the first catalyst has a first concentration at a first
position and the second catalyst has a second concentration at a second position, wherein the first
position is closer to the entrance than the second position and the first concentration is lower than
the second concentration, and wherein the first and second catalyst are comprised of the identical
catalyst material.
2. (original) The solid oxide fuel cell of claim 1 wherein catalyst
concentration monotonically increases as distance from the anode flow channel entrance
increases for positions between the first position and the second position.
3. (original) The solid oxide fuel cell of claim 2 wherein catalyst
concentration increases linearly between the first and second position as distance from the anode
flow channel entrance increases.
4. (original) The solid oxide fuel cell of claim 1 wherein catalyst
concentration increases stepwise between the first and second position as distance from the anode
flow channel entrance increases.

5. (original) The solid oxide fuel cell of claim 1 wherein the catalyst is present in an amount from about 1% to about 50% of the total weight of the anode.

6. (original) The solid oxide fuel cell of claim 1 wherein the anode, cathode, and electrolyte layer are arranged in substantially parallel sheets.

7. (original) The solid oxide fuel cell of claim 6 further comprising one or more additional anode flow channels.

8. (original) The solid oxide fuel cell of claim 6 wherein the cathode defines at least a portion of a cathode flow channel, the cathode flow channel having a cathode flow channel entrance for the introduction of an oxidizing component into the cathode flow channel and a cathode flow channel exit.

9. (original) The solid oxide fuel cell of claim 8 wherein the cathode flow channel is adapted to allow flow of the oxidizing component in a direction opposite to the flow of the fuel in the anode flow channel.

10. (original) The solid oxide fuel cell of claim 1 wherein the anode, cathode, and electrolyte layer are arranged concentrically.

11. (previously presented) The solid oxide fuel cell of claim 1 wherein the catalyst material comprises nickel or a nickel-containing compound.

12. (original) An automobile at least partially powered by the solid oxide fuel cell of claim 1.

13. (previously presented) A solid oxide fuel cell comprising:
a cathode having one or more cathode flow channels;
an electrolyte layer adjacent to the cathode; and

an anode adjacent to the electrolyte layer, the anode comprising one or more anode flow channels each anode flow channel having an anode flow channel entrance and a first and second catalyst that promotes reforming and being dispersed within or upon a surface of the one or more anode flow channels such that the first catalyst has a first concentration at a first position and the second catalyst has a second concentration at a second position, wherein the first position is closer to the anode flow channel entrance than the second position and the first concentration is lower than the second concentration, and wherein the first and second catalyst are comprised of the identical catalyst material.

14. (original) The solid oxide fuel cell of claim 13 wherein catalyst concentration monotonically increases as distance from the anode flow channel entrance increases for positions between the first position and the second position.

15. (original) The solid oxide fuel cell of claim 14 wherein catalyst concentration increases linearly between the first and second position as distance from the anode flow channel entrance increases.

16. (previously presented) The solid oxide fuel cell of claim 13 wherein the catalyst comprises nickel or a nickel-containing compound.

Claims 17-25 (canceled)

26. (previously presented) The solid oxide fuel cell of claim 1, wherein the first catalyst is presented with a lower fuel reforming rate compared to the second catalyst.